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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,360	02/06/2004	Hitoshi Furukawa	00862.023449.	5049

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EXAMINER	
MILIA, MARK R	

ART UNIT	PAPER NUMBER
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/772,360	FURUKAWA, HITOSHI	
	Examiner	Art Unit	
	Mark R. Milia	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 7/1/08 and has been entered and made of record. Currently, claims 1-12 are pending.

Response to Arguments

2. Applicant's arguments, see page 6 of the remarks, filed 7/1/08, with respect to the rejection of claims 1-12 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0068548 to Sugita have been fully considered and are persuasive. The rejection of claims 1-12 has been withdrawn due to the sworn translation of the priority document that antedates Sugita.

3. Applicant's arguments filed 7/1/08 regarding the rejection of claims 1-12 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,131,124 to Hanyu have been fully considered but they are not persuasive.

Applicant asserts that Hanyu does not disclose or suggest at least the feature of transferring data from a second controller to a first controller via a signal line to rewrite a nonvolatile memory, in synchronization with a control signal notified from the first controller to the second controller via another signal line. The examiner respectfully disagrees as Hanyu does disclose such features. Particularly, Hanyu states that an

input section **502** determines when an instruction to download a control program from a host computer is input via a control panel **303** and if so, the engine controller **301** terminates all operations of the printer engine and clears the flash EEPROM **301**b as to ready the flash EEPROM for download on the new control program. After the engine controller **301** completes the above tasks, it sends a demand for transmission, which is also seen as a notification that the engine controller is ready for control program download, to the printer controller **300**, which in turn acquires the control program from the host and then transfers the control program frame by frame to the engine controller **301** for writing of the program into memory, flash EEPROM **301**b (see column 8 line 59-column 9 line 60). Further Hanyu states that the receiving section **503**, which is made up of the CPU **301**a, RAM **301**c, and controller I/F **301**d of the engine controller **301**, determines whether the frame received is the last frame, an if not the CPU **301**a demands the transmission of the next frame until all frames have been received (see column 9 lines 61-65). Therefore rewrite data is transferred from the printer controller to the engine controller based on a notification from the engine controller, thereby creating synchronization. The instant application discloses establishing serial communication synchronization via a video interface that aids in control program transmission. Specifically on page 14 line 17-page 15 line 6 of the specification, description is made that is similar to what is disclosed by Hanyu. Particularly, the specification states that the engine section notifies the controller section that the engine section has changed, (analogous to the engine controller **301** sending a demand for transmission, which is also seen as a notification that the engine controller is ready for control program

download, to the printer controller **300**) and when it is determined that the engine section can received data, transmission is executed by the controller section, and with this synchronization of serial communication is established, (analogous to the printer controller **300** acquiring the control program from the host and then transferring the control program frame by frame to the engine controller **301** for writing of the program into memory, flash EEPROM **301**b). Thus, Hanyu discloses transferring data from a second controller to a first controller via a signal line to rewrite a nonvolatile memory, in synchronization with a control signal notified from the first controller to the second controller via another signal line.

Therefore the rejection of claims 1-12, as cited in the previous rejection is maintained.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,131,124 to Hanyu.

Regarding claims 1 and 11, Hanyu discloses a data transfer method in an image forming apparatus in which communication between a first controller and a second controller is performed via signal lines, wherein the first controller controls an engine section for forming an image, wherein the engine section includes a nonvolatile

memory, and wherein the second controller transmits image data to the engine-section first controller (see column 3 lines 50-66), the method comprising steps of: transferring rewrite data from the second controller to the first controller via a signal line to rewrite the nonvolatile memory, in synchronization with a control signal notified from the first controller to the second controller via another signal line (see Fig. 3, column 4 lines 47-49, column 7 lines 30-34 and 48-54, column 8 lines 59-67, and column 9 lines 3-50, synchronization is established after an instruction to download a control program is detected, then the engine controller requests transmission of a downloaded program from the printer controller, which in turn receives the downloaded program from the host computer, thereby instruction to retrieve the downloaded control program is initiated and in response the control program is transferred to the engine controller and the flash memory is rewritten with the new program), and rewriting the nonvolatile memory of the engine section by the rewrite data transferred in synchronism (see Fig. 3, column 8 lines 1-8, and column 9 lines 51-65).

Regarding claim 12, Hanyu discloses a controller which transmits image data to an engine section which comprises a nonvolatile memory and forms an image, comprising: communication paths for communicating with an engine controller of the engine section (see Fig. 3 and column 5 lines 7-10 and 63-65), and a transmitter for transmitting mode designation data which designates a mode for rewriting the nonvolatile memory of the engine section (see column 9 lines 3-17 and 32-37), wherein the transmitter transmits data to the engine controller via a communication path to rewrite the nonvolatile memory, in synchronization with a control signal notified from the

engine controller via another communication path after transmission of the mode designation data via the communication path (see Fig. 3, column 4 lines 47-49, column 7 lines 30-34 and 48-54, column 8 lines 59-67, and column 9 lines 3-50, synchronization is established after an instruction to download a control program is detected, then the engine controller requests transmission of a downloaded program from the printer controller, which in turn receives the downloaded program from the host computer, thereby instruction to retrieve the downloaded control program is initiated and in response the control program is transferred to the engine controller and the flash memory is rewritten with the new program).

Regarding claim 2, Hanyu further discloses wherein the control signal is used as a predetermined signal in an image forming operation and as a sync signal in rewriting the nonvolatile memory (see column 3 lines 50-54, column 4 lines 42-66, and column 8 line 59-column 9 line 65).

Regarding claim 3, Hanyu further discloses wherein the first controller controls the control signal to notify the second controller section of a state of the first controller (see column 9 lines 32-37).

Regarding claim 4, Hanyu further discloses wherein the state of the first controller is one of a data transfer error, an erase or rewrite operation result of the nonvolatile memory, and an end of the rewrite operation of the nonvolatile memory (see column 5 lines 14-20 and column 9 line 66-column 10 line 5).

Regarding claim 5, Hanyu further discloses wherein the first controller controls the control signal to an OFF state in accordance with data reception from the second

controller and to an ON state when preparation for next data reception is ended (see column 9 lines 4-10 and 32-37).

Regarding claim 6, Hanyu further discloses wherein the second controller monitors a change of the control signal to an ON state for a predetermined time to detect a state of the first controller (see column 5 lines 14-20 and column 9 lines 32-50).

Regarding claim 7, Hanyu further discloses wherein the predetermined time changes depending on at least a size of the rewrite data to be transferred and a block size of the nonvolatile memory to be erased (see column 8 lines 66-67 and column 9 lines 4-37).

Regarding claim 8, Hanyu further discloses wherein the rewrite data is a control program code data (see column 3 lines 50-54, column 3 line 66-column 4 line 3, and column 4 lines 47-49).

Regarding claim 9, Hanyu further discloses wherein the control signal is a signal that indicates a state change of the engine section (see column 8 line 59-column 9 line 10 and column 9 lines 32-37).

Regarding claim 10, Hanyu further discloses wherein the nonvolatile memory is a flash memory (see Fig. 3 **301b**).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571)272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached at (571) 272-7437. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia
Examiner
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/Mark R. Milia/
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